

## ABSTRACT

The present invention provides a synchronizing data protocol comprising one or more serial input-output (SIO) control word(s) and data passed across a high voltage interface, to allow the elimination of a frame synchronization signal (and corresponding AC coupling capacitors). The present invention has particular applicability to, e.g., time division multiplexed (TDM) data, serial data communication devices, or synchronous serial communication interfaces in general, and to the communication between a controller and a codec in an audio codec device in accordance with the AC '97 Specification, i.e., the AC Link. The synchronizing data protocol is implemented over a transmit data signal line to provide occasional synchronization (i.e., not frame-by-frame synchronization) between the two communicating devices. The master device includes a preamble insertion module to insert a predetermined preamble code word into the transmitted data stream. An interrupt is sent to the slave device by withholding the data clock signal for a predetermined amount of time. Upon receipt of the interrupt, the slave device monitors the data stream for the presence of the preamble code word. Upon detection of the preamble code word, data transmitted by the codec is again enabled.